#### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO. CA 95814-5512



# STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

implementation of Renewables	)	Docket No. 03-RPS-10/8
Portfolio Standard Legislation (Public	)	RPS Proceeding
Utilities Code Sections 381, 383.5,	)	
399.11 through 399.15, and 445;	)	Notice of Staff Workshop
[SB 1038], [SB 1078])	)	

# NOTICE OF STAFF WORKSHOP IN RENEWABLES PORTFOLIO STANDARD PROCEEDING

The staff workshop will be held:

# TUESDAY, MARCH 25, 2003

Beginning at 9:30 a.m.
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Hearing Room A
Sacramento, California
(Wheelchair Accessible)

The Energy Commission and California Public Utilities Commission (CPUC) staff seeks input from interested parties on the eligibility criteria for California's Renewables Portfolio Standard (RPS), which was established by Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002) and for the New Renewable Facilities Program, which was established by Senate Bill 1038 (SB 1038, Sher, Chapter 515, Statutes of 2002). Although a staff workshop, Commissioners and/or their advisers may attend.

The Energy Commission and the CPUC have established a collaborative process to develop rules to implement the state's RPS. The agencies have designated collaborative staff that works in concert in each agency's proceedings.

The collaborative staff asks interested parties to provide information at the workshop on the three following topics:

- 1) What constitutes "incremental geothermal generation" as defined in SB 1078?
- 2) What renewable technologies should be considered eligible to meet the RPS, and what criteria might be needed to determine whether a technology meets the criteria established in SB 1078 and SB 1038?
- 3) Is out-of-state power eligible for the RPS?

#### **Attachments**

Attachment A to this notice provides an agenda and lists of questions to be considered at the workshop. Attachment B provides excerpts of the statutory language from SB 1078 and SB 1038 relevant for discussion at the workshop.

#### **Next Steps**

The Renewables Committee (Committee) will use information from this workshop, along with input from collaborative staff and technical consultants, to develop recommendations for addressing RPS issues related to incremental geothermal generation, RPS eligibility, and out-of-state power.

These recommendations will be discussed in a Preliminary Proposed Decision, which the Committee expects to release for public comment on April 18, 2003, and consider at a Committee Hearing on May 1, 2003. The Committee plans to have a final proposed decision for the Energy Commission to consider adopting at its regularly scheduled Business Meeting on May 28, 2003.

### **Background**

The RPS legislation requires that the Energy Commission and CPUC work collaboratively to implement the RPS and assigns specific roles to each agency. Pursuant to SB 1078, the Energy Commission must do the following:

- 1. Certify eligible renewable resources that meet criteria contained in the bill,
- Design and implement a tracking and verification system to ensure that renewable energy output is counted only once for the purpose of the RPS and for verifying retail product claims in California or other states, and
- 3. Allocate and award supplemental energy payments as specified in SB 1038 to eligible renewable energy resources to cover above-market costs of renewable energy.

At its regularly scheduled Business Meeting on March 5, 2003, the Energy Commission adopted Order No. 03-0305-04 authorizing the Renewables Committee to oversee implementing the RPS under SB 1078 and SB 1038. On March 14, 2003, the Committee issued an order initiating the RPS Proceeding under Docket No. 03-RPS-1078 and establishing a proposed schedule and process for addressing RPS issues.

The Committee order directs staff to hold a public workshop on March 25, 2003 to solicit input from interested parties on RPS issues related to incremental geothermal generation, RPS eligibility, and out-of-state power. As specified in the March 14, 2003 Committee Order, other workshops will be held subsequently on the tracking and verification system and supplemental energy payments.

#### **Written Comments**

The Energy Commission encourages members of the public to submit written comments. Twelve copies of any comments filed by mail or in person should be provided to the Energy Commission's Dockets Office. Parties may also file a single copy electronically with the Dockets Office.

#### Comments should be sent to:

California Energy Commission
Dockets Office
Attn: Docket No. 03-RPS-1078
1516 Ninth St., MS-4
Sacramento, CA 95814-5512
E-Mail: docket@energy.state.ca.us

All written materials filed with the Dockets Office will become part of the public record in this proceeding. Written comments will be accepted until close of business March 28, 2003.

#### **Assistance**

The Energy Commission's Public Adviser provides assistance to the public regarding Energy Commission procedures and participation in Energy Commission activities. Anyone wishing to obtain information on how to participate in this meeting may reach the Public Adviser's Office by phone at (916) 654-4489, toll free at (800) 822-6228, or by e-mail at [pao@energy.state.ca.us]. If you have a disability and need assistance to participate in this workshop, please contact Lou Quiroz at (916) 654-5146 or by e-mail at [lquiroz@energy.state.ca.us]. Technical questions regarding the subject matter of this notice may be addressed to Tim Tutt at (916) 654-4590 or by e-mail at [ttutt@energy.state.ca.us]. News media should direct inquiries to Assistant Director Claudia Chandler at (916) 654-4989 or by e-mail at [energia@energy.ca.gov].

Date:	STATE OF CALIFORNIA ENERGY
	RESOURCES CONSERVATION AND
	DEVELOPMENT COMMISSION

JOHN L. GEESMAN Commissioner and Presiding Member Renewables Committee

Date Mailed:

Mass Mail List: Master 63/New

JAMES D. BOYD Commissioner and Associate Member Renewables Committee

# **Attachment A**

## **Agenda –** Begin at 9:30:

Introductory Remarks
Incremental Geothermal
Eligible Technologies
Eligibility of Out of State Power

Below is a list of questions intended to stimulate open discussion in the workshop. Parties are encouraged to raise other questions that apply to the topics at the workshop.

#### **Questions:**

#### I. Incremental Geothermal

- 1. Was any geothermal energy from a facility that began operating before September 26, 1996 under contract to an Investor Owned Utility (IOU) during 2001? If so, is the expectation that those sales of geothermal generation would become part of that IOU's RPS baseline?
- 2. If an IOU contracted for geothermal generation from a facility that began operation before September 26, 1996 as part of its Transitional Procurement, and if that energy is not determined to be "incremental" geothermal energy pursuant to SB 1078, would that energy become an "adjustment" to that IOU's baseline?
- 3. If geothermal energy purchased by an IOU as part of its Transitional Procurement is determined to be "incremental" pursuant to SB 1078, would that energy count toward fulfillment of that IOU's RPS Annual Procurement Target? Would such energy be eligible for Supplemental Energy Payments (SEP) pursuant to SB 1038?
- 4. If the Energy Commission identifies incremental geothermal generation that is not yet under contract to a retail seller, and a retail seller contracts for that incremental generation through a future RPS solicitation, should that energy be eligible for Supplemental Energy Payments?
- 5. Does the concept of incremental geothermal generation apply only to production from vapor-dominated resources, or is it applicable to liquid-dominated resources as well?
- 6. SB 1078 refers to geothermal "historical production trends." How many years of historical production should the Energy Commission consider?

- 7. Should such historical production trends be examined on a well-by-well, facility-by-facility basis, or for the geothermal field as a whole?
- 8. Should entities that are seeking an Energy Commission determination that a portion of their geothermal generation is incremental be required to make public any data that they use to substantiate such a claim?
- 9. What criteria should the Energy Commission use in measuring incremental geothermal production? Do the criteria differ depending on whether the geothermal resource is vapor or liquid dominated? What methodology should the Energy Commission use for either case? Should incremental generation be measured in energy (GWh) or capacity (MW) terms?
- 10. What constitutes capital investment that results in incremental production, rather than maintenance of production? How should the Energy Commission distinguish between investments that increase production versus investments that maintain production in the context of a declining historical production trend?
- 11. Do investments in wastewater injection projects result in incremental production? How is this incremental production measured on a facility basis?
- 12. If the Energy Commission certifies an amount of incremental geothermal production, would that amount be a constant, or might it change over time? For example, if a declining trend is established, and it is shown that through capital investment that decline has been stabilized, might the amount that is incremental be regarded as increasing over time?
- 13. If you are an entity seeking to have the Energy Commission certify a portion of your geothermal production as incremental, what do you claim your incremental generation to be? In substantiating such claim, please detail the capital investments made, how they have contributed to incremental production, what historical production trends they have altered, and how Questions 9 11 are reflected in your claim.
- 14. If you are an entity who expects to dispute claims of incremental geothermal generation, on what basis do you expect to dispute such claims?
- 15. If a portion of the generation from a geothermal facility (or from a geothermal field) is determined to be incremental, and if only a portion of the generation from that unit (or from that geothermal field) is sold to an IOU pursuant to an RPS solicitation, how is one to determine whether the kilowatt-hour sold to the IOU is "incremental" or "existing?"
- 16. Within the Geysers, can steam be shifted from one generating unit to another? If so, and if incremental geothermal generation were determined on a unit-by-unit

basis, could "existing" steam from one or more units be shifted to another unit so as to make that unit appear to have "incremental" generation when it really does not? If it can, how can the Energy Commission prevent such manipulation?

# II. Definition of "in-state renewable electricity generation technology facility"

#### A. Biomass

To meet the definition of an "in-state renewable electricity generation technology facility," new biomass facilities must certify to the Energy Commission's satisfaction that their fuel use is limited to certain types of fuels that meet certain requirements (the specific language is shown under Attachment B).

- 17. What exactly constitutes an agricultural crop, waste, and/or residue?
- 18. What is the best way for the Energy Commission to certify the amount of agricultural residues or wastes received as fuel for a biomass power plant?
- 19. Should the Energy Commission develop a list of approved fuel material or approve fuel material on a case-by-case basis?
- 20. What is the best way for project developers to certify their fuel use to the Energy Commission?
- 21. How should the Energy Commission verify, monitor, and/or enforce meeting this requirement?
- 22. What other agencies should the Energy Commission work with in developing a certification process for biomass facilities?
- 23. How should the Energy Commission coordinate with the Department of Food and Agriculture and the Department of Forestry and Fire Protection to ensure that the harvesting requirements for wood sources are met?
- 24. Does "biodiesel" qualify as biomass? Is there a standard definition of "biodiesel?"
- 25. How does the Energy Commission certify that biodiesel will be used for electricity generation from stationary sources in California?
- 26. Should the Energy Commission attempt to define borderline technologies or establish a process by which to determine technology eligibility on a case-by-case basis?

# **B. Small Hydro**

- 27. How should "new or increased appropriation or diversion" be defined? What criteria should be developed to evaluate if a project satisfies this requirement and meets the RPS eligibility requirements for new small hydro? Should a "new diversion" be defined as any new physical structure placed within a stream channel, or only new physical structures which divert water out of a stream channel?
- 28. What agency determines if a new facility requires new or increased appropriation or diversion of water? Is the State Water Resources Control Board the appropriate agency? Does the answer change depending on the size of the project or the technology used?
- 29. How long would it take to develop a new small hydro project that would not require a new or increased appropriation or diversion? How much time is needed to attain environmental and any other necessary permits to meet state and federal requirements? If the project is smaller than 5 MW, does the process or timeline change?
- 30. Could small hydropower facilities, or "incremental hydro" be added to existing dams that currently have no generating capacity such that the energy produced meets the RPS eligibility requirements for new small hydro? What criteria should be used to make such a determination? Are there barriers to market entry for incremental hydro of which the Energy Commission should be made aware?
- 31. Could existing hydropower facilities be repowered such that the energy produced meets the RPS eligibility requirements for new small hydro? What criteria should be used to make such a determination?
- 32. If you answer yes to questions 30 or 31, please provide information about the feasible potential for development, including identifying and accounting for any economic and environmental barriers. What is the expected timeline for developing such projects?

# C. Municipal Solid Waste

Municipal solid waste technologies only qualify if they use a "solid waste conversion" process rather than a combustion process.

- 33. How does the Energy Commission determine if a solid waste conversion technology meets the requirements in SB 1078?
- 34. In defining "solid waste conversion" technologies that are to remove all recyclable materials and green waste materials from the solid waste stream "to

- the maximum extent feasible," should this refer to "technically or economically feasible," and how should "extent" be quantified?
- 35. What, if any, additional criteria should the Energy Commission impose on these types of facilities?

# III. Eligibility of Out of State Power

- 36. What does "near the border of the state" mean? 5 miles? 25 miles?
- 37. How should we verify that the first point of connection to the Western Electric Coordinating Council (WECC) grid is in California?
- 38. Could out-of-state power be certified as an eligible renewable resource for purposes of meeting the RPS? Could such out-of-state power include power from Mexico?
- 39. For power from out-of-state sources, how could we verify that the power is produced using an eligible electricity generating technology?
- 40. The definition of "in state renewable electricity generation technology facility" includes ocean wave, ocean thermal, or tidal current technologies. Are there issues with designating off-shore facilities that use these technologies as "in-state"?
- 41. To the extent that out-of-state power is represented for sale in California through Renewable Energy Credits, or RECs, is this power eligible for the RPS? For SEP payments? If so, should any constraints be placed on the eligibility and tradability of these RECs? For example, should RECs associated with energy that is eligible for SEP payments not be tradeable?

# **Attachment B**

# **Relevant Legislative Language:**

#### Section 399.13 of SB 1078 states:

"The Energy Commission shall . . . certify eligible renewable energy resources that it determines meet the criteria described in subdivision (a) of Section 399.12."

### Section 399.12 of SB 1078 refers to "eligible renewable energy resource" as:

- (a) (1) "Eligible renewable energy resource" means an electric generating facility that is one of the following:
- (1) The facility meets the definition of "in-state renewable electricity generation technology" in Section 383.5.
- (2) A geothermal generation facility originally commencing operation prior to September 26, 1996, shall be eligible for purposes of adjusting a retail seller's baseline quantity of eligible renewable energy resources except for output certified as incremental geothermal production by the Energy Commission, provided that the incremental output was not sold to an electrical corporation under contract entered into prior to September 26, 1996. For each facility seeking certification, the Energy Commission shall determine historical production trends and establish criteria for measuring incremental geothermal production that recognizes the declining output of existing steamfields and the contribution of capital investments in the facility or wellfield.
- (3) The output of a small hydroelectric generation facility of 30 megawatts or less procured or owned by an electrical corporation as of the date of enactment of this article shall be eligible only for purposes of establishing the baseline of an electrical corporation pursuant to paragraph (3) of subdivision (a) of Section 399.15. A new hydroelectric facility is not an eligible renewable energy resource if it will require a new or increased appropriation or diversion of water under Part 2 (commencing with Section 1200) of Division 2 of the Water Code.
- (4) A facility engaged in the combustion of municipal solid waste shall not be considered an eligible renewable resource unless it is located in Stanislaus County and was operational prior to September 26, 1996. Output from such facilities shall be eligible only for the purpose of adjusting a retail seller's baseline quantity of eligible renewable energy resources."

# Section 383.5 (b) (1) of SB 1038 defines an "in-state renewable electricity generation technology" as:

- (1) "In-state renewable electricity generation technology" means a facility that meets all of the following criteria:
- (A) The facility uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.

- (B) The facility is located in the state or near the border of the state with the first point of connection to the Western Electricity Coordinating Council (WECC) transmission system located within this state.
- (C) For the purposes of this subdivision, "solid waste conversion" means a technology that uses a noncombustion thermal process to convert solid waste to a clean burning fuel for the purpose of generating electricity, and that meets all of the following criteria:
- (i) The technology does not use air or oxygen in the conversion process, except ambient air to maintain temperature control.
- (ii) The technology produces no discharges of air contaminants or emissions, including greenhouse gases as defined in Section 42801 of the Health and Safety Code.
  - (iii) The technology produces no discharges to surface or groundwaters of the state.
  - (iv) The technology produces no hazardous wastes.
- (v) To the maximum extent feasible, the technology removes all recyclable materials and marketable green waste compostable materials from the solid waste stream prior to the conversion process and the owner or operator of the facility certifies that the those materials will be recycled or composted.
- (vi) The facility at which the technology is used is in compliance with all applicable laws, regulations, and ordinances.
- (vii) The technology meets any other conditions established by the State Energy Resources Conservation and Development Commission.
- (viii) The facility certifies that any local agency sending solid waste to the facility is in compliance with Division 30 (commencing with Section 40000) of the Public Resources Code, has reduced, recycled, or composted solid waste to the maximum extent feasible, and shall have been found by the California Integrated Waste Management Board to have diverted at least 30 percent of all solid waste through source reduction, recycling and composting."

# Section 383.5 (d) (6) of SB 1038 defines eligibility criteria for new biomass as:

"Facilities generating electricity from biomass energy shall be considered an in-state renewable electricity generation technology facility to the extent that they certify to the satisfaction of the Energy Commission that fuel utilization is limited to the following:

- (A) Agricultural crops and agricultural wastes and residues.
- (B) Solid waste materials such as waste pallets, crates, dunnage, manufacturing, and construction wood wastes, landscape or right-of-way tree trimmings, mill residues that are directly the result of the milling of lumber, and rangeland maintenance residues.
  - (C) Wood and wood wastes that meet all of the following requirements:
- (i) Have been harvested pursuant to an approved timber harvest plan prepared in accordance with the Z'berg-Nejedly Forest Practice Act of 1973 (Ch. 8 (commencing with Sec. 4511), Pt. 2, Div. 4, P.R.C.).
- (ii) Have been harvested for the purpose of forest fire fuel reduction or forest stand improvement.
- (iii) Do not transport or cause the transportation of species known to harbor insect or disease nests outside zones of infestation or current quarantine zones, as identified by the Department of Food and Agriculture or the Department of Forestry and Fire

Protection, unless approved by the Department of Food and Agriculture and the Department of Forestry and Fire Protection."

# Section 383.5 (d) (2) (B) of SB 1038 states:

- (B) The Energy Commission may determine as part of a solicitation, that a facility that does not meet the definition of "in-state renewable electricity generation technology" facility solely because it is located outside the sate, is eligible for funding under this subdivision if it meets both of the following requirements:
- (i) It is located so that it is or will be connected to the Western Electricity Coordinating council (WECC) transmission system.
- (ii) It is developed with guaranteed contracts to sell its generation to end use customers subject to the funding requirements of Section 381, or to marketers that provide this guarantee for resale of the generation, for a period of time at least equal to the amount of time it receives incentive payments under this subdivision.